

Day 1: June 6, 20204

Poster Presentations - 10:45 to 11:30 and 15:45 to 16:30

| Paper ID | Author | Paper Title |
|----------|---|---|
| 50 | Jeno S | Investigation of flow field design for modified bipolar plates in proton exchange membrane fuel cells |
| 69 | Pandiyan R | Fuzzy logic based electromagnetic energy harvesting system using self-power synchronous switch energy extraction circuits |
| 98 | Renitha P | Napier grass potential over cow manure – An experimental study |
| 106 | Man Mohan | Building thermal comfort and energy savings: A review of performance, challenges, opportunities, and recommendations in phase change material integration within building elements |
| 176 | Piyush Ah, Arjun Aji, Amit Ravisankar, Akash A S, | Effect of tubercles on the performance of an aerofoil |
| 197 | Sanketh T Chavhan | Catalyst preparation and CFD analysis of reactor for fischer tropesch process |
| 208 | Yogesh N Nandanwar | Experimental investigations on thermal performance of parabolic dish collector with conical receiver |
| 233 | Dandugula Nandini | Numerical analysis of influence of air curtain jet velocity on the spread of smoke in a dual compartment |
| 247 | Sumit Khatri | Improving the cooling efficiency of electric vehicles by using parallel and staggered mini channels with a hybrid nanofluid consisting of Fe ₃ O ₄ and Al ₂ O ₃ |
| 285 | Pratik Manorkar | A study on the impact of PCM and vapour chamber integration on temperature control of proton exchange membrane fuel cell |
| 293 | Kushwaha Suman Saurabh | Application of MCDM techniques for suitable site selection of offshore wind farms in indian EEZ region |
| 295 | Roshan Rawal | Enhancing wind power forecasting in jaisalmer, india: A machine learning approach |
| 294 | Amit Prabhakar | Comprehensive analysis and forecasting of wind power using machine learning |
| 296 | Mayank D Jat | Integrated modeling and simulation framework for powertrain dynamics: Unveiling insights into vehicle performance via simulink and indian driving cycle analysis |
| 302 | Suraj P | Catalytic slow pyrolysis of torrefied groundnut shells for enhancing bio-oil yield and quality |
| 57 | Jishnu Chandran R | Influence of spindle tip geometry on the performance of variable geometry co ₂ ejector |
| 129 | Aparesh Datta | Numerical study on the effect of semi-circular venturi barrier height on droplet generation in a T-junction microchannel |
| 137 | Shital Macchindra Pawar | A preliminary investigation of pressure drop characteristics in bulk quantity of onion using Computational Fluid Dynamics |
| 148 | Ajay Krishnan R K | Wind flow analysis around urban structures |
| 152 | Subhashree Prusty | Numerical analysis of mixing in a micro droplet with rotating chain of magnetic microspheres for droplet based microfluidic applications |
| 154 | Prashant Narayan Panday | Kinematics of an oil droplet at an air-water interface driven by surface waves |
| 158 | Joel Thomas Thazhamon, Aswin R B | Numerical analysis of lift enhancement in vertical axis wind turbine blades |
| 178 | Mitun A U, Arumugam Thirisa | Novel approach to coagulation studies in milli-fluidic reactors for laundry wastewater treatment |
| 211 | Anoop Kumar M | A CFD analysis of the flow structure inside a R141b ejector to identify the internal flow variations in its design and off-design working modes |
| 229 | Sivaprasad R, Rohith P, Jibin Babu B S, Abhiram. P | Aerodynamic design and analysis of hyperloop Pod |
| 230 | Siva Shaji | A comparative analysis of two different approaches for the simulation of transport of landfill leachate |
| 240 | Rajeshwar Verma | Surge analysis for a lift irrigation project having long pipe line |
| 301 | Fuzail Khan | Numerical investigation on thermal performance of lithium-ion battery thermal management system using cold plate with multiphase fluid |
| 305 | Sutheesh P M | Numerical investigation of von kármán vortex shedding around the square cylinder under uniform and shear flow upstream conditions |
| 39 | Kakumanu Suvarna Jaya Prakash | Analysis of compressed ignition engine performance using linseed oil-based biodiesel |
| 42 | Pratham Kamble, Debojit Konwar, Bhaskarjya Jyoti Deka | Performance analysis of a combined thermoelectric generator, organic rankine and absorption refrigeration cycle driven by diesel engine exhaust |
| 75 | Onkar Arunkumar Dhumal | Physisorption characterization of superabsorbents for selection of composite desiccant materials |
| 203 | Kripesh B | Experimental investigation on the effect of the integration of phase change material on thermally localized multistage still desalination system |
| 309 | Sameer S Gajghate | Numerical study of pool boiling heat transfer enhancement on the tip of hypodermic needle using graphene nanofluids |
| 201 | Soodipa Chakraborty | Computational investigation on heat transfer enhancement under vectored annular jet |
| 299 | Boddepalli Vikas | Investigation of flow over an air foil |
| 63 | Rajiva Lochan Mohanty | Hydrodynamic characteristics of two-immiscible fluid flow through parallel plate under electromagnetic condition |

| | | |
|-----|--------------------------|---|
| 220 | Vignesh Suresh Iyer | Modelling and simulation of indirect forced convection solar dryer |
| 109 | Deepak Kumar Raj | Three-dimensional study of flow past elliptical cylinder in microchannel |
| 268 | Aditya Bhardwaj | Investigation of properties of copper and copper-cobalt composite on copper substrate for application in supercapacitor's electrode |
| 277 | Pradnya Sameer Deshpande | Development and characterization of nano-enhanced solid-solid organic phase change material for thermal energy management. |
| 219 | Nakul Neupane | ML based predictive modeling of air-side heat transfer coefficient in finned-tube heat exchangers |
| 306 | Pratit Sunder Dev Roy | Performance analysis of cylindrical heat pipe with corrugated wick |
| 186 | Sourabh Jain | Numerical investigation on the effect of radiatively enhanced coating on the performance of photovoltaic panels for concentrated solar power applications |

Day 2: June 7, 20204

Poster Presentations - 10:45 to 11:30 and 15:45 to 16:30

| Paper ID | Author | Paper Title |
|----------|--|---|
| 80 | Abhijit Patil | Impact of thermal buoyancy on a heat transfer across a single heated square cylinder at reynolds number $Re = 20$ and 40 |
| 83 | Janhavi Baskaran, Varchasvee D Sarma, Upasana Nandagiri, Dhriti Yogish | Numerical investigation on heat transfer characteristics for upward flow of supercritical water in a dimpled tube |
| 111 | Navaneeth C K | Performance study of zig-zag corrugated plate heat exchangers |
| 115 | V Jaya Lakshmi | Use of NiCrCoFeAl ₃ as a state of the art bond coat material for thermal barrier coating (TBC) applications |
| 117 | Santosh G Dabade | Experimental investigation of the composition of clay balls to optimize the desiccant effect and strength |
| 122 | Santosh Dabade | Investigation of thermal characteristics of indigeneous natural fibre cooling pads for matrix configuration and fiber composition |
| 216 | Arumuga Perumal D | Exergy analysis of bifurcated microchannel with CNT nanofluid for thermal management of microprocessor |
| 128 | Vivek Kumar | Design of a microchannel heat sink to augment the thermal performance and minimise the entropy generation with microchamber and diamond rib in a wavy channel |
| 139 | Aabir Das | Performance improvement of DLR scramjet combustor with variation of strut and divergent angle |
| 143 | Kshitij Gupta | Optimizing shell and tube heat exchanger design: A case study in cryogenic applications |
| 151 | Kalamata Chandu | Thermal comfort study while commuting to classes in university |
| 166 | Ranjay Kumar Singh | Assessment of detonation Parameters of H ₂ -O ₂ /air detonations in the combined presence of inert diluents and ignition promoters |
| 167 | Shashikant Das | Exergy analysis of the physiology of human body at different environment conditions |
| 168 | Ranjay Kumar Singh | Investigating the chemical length scales of fuel-sensitized hydrogen-air detonations |
| 171 | Amogh Ashwin Thondavadi | Numerical investigation of twin circular cylinder in double forward facing step flow |
| 179 | Dhayanidhi E | Investigation on the impact of surfactants on the stability and thermophysical properties of ethylene glycol/H ₂ O – based nanofluid incorporating functionalized graphene nanoplatelets |
| 258 | Suhailam | Enhancing predictive precision in ethane-ethylene separation: Unveiling potential through machine learning for binary distillation column |
| 189 | Vishwjeet Choudhary | Development and validation of a numerical model for predicting thermal performance of double tube heat exchanger |
| 200 | Neeraj Sunheriya | Performance analysis of modified solar water heater with V trough reflector |
| 288 | Unnikrishnan K S | Numerical performance analysis of PV with different PCM-based heat sink |
| 212 | Naman Jain | Enhancing heat transfer in minichannel nanofluid flow through strategic magnetic field application: A study on convection enhancement in NiO ₂ +H ₂ O nanofluid |
| 224 | Antony Giegy | Numerical analysis on the thermal performance of insulated containers |
| 231 | Krishnamurti Motghare | CFD analysis of melting performance for different phase change materials used for low temperature latent heat thermal storage system |
| 237 | Deep Samanta | Rate-dependent bifurcation around subcritical Hopf point in pulse combustor |
| 243 | Abhik Adhikari | Heat transfer augmentation due to vectored annular jet impingement – A numerical study |
| 245 | Anubhab Chatterjee | A short review on annular jet heat impinging transfer |
| 277 | Pradnya Sameer Deshpande | Development and characterization of nano-enhanced solid-solid organic phase change material for thermal energy management. |
| 284 | Adithyaa R | Experimental research on the characteristics of a chicken fat methyl ester and LPG fuelled DICI engine: A dual fuel approach |
| 287 | Aganivesh P. Ogale, Shantanu Vivek Kulkarni, Prathamesh Bhoir | Experimental investigation on glycerol based liquid dessicant dehumidifier for hot and humid region |
| 298 | Abhinandan Bhardwaj | Computational study on the thermo-fluidic performance of manifold microchannels with circular and square pin fin |

| | | |
|-----|-------------------------|---|
| 307 | Sijo K K | Numerical investigation of free piston stirling refrigerator systems for deep freezing applications |
| 308 | Archana B Suresh | Numerical simulation of split type free piston stirling cryocooler |
| 268 | Aditya Bhardwaj | Investigation of properties of copper and copper-cobalt composite on copper substrate for application in supercapacitor's electrode |
| 282 | Aiswarya V | Co-filler modified microcapsule/polyurethane composites for enhanced solar performances |
| 310 | Vanisree G S | Ultrasonication-assisted sustainable synthesis of biodiesel using cycas circinalis seed shell biochar catalyst |
| 306 | Pratit Sunder Dev Roy | Performance analysis of a cylindrical heat pipe with corrugated wick |
| 300 | Kalapalli Krishna Vamsi | Jet flow interaction studies with a tangential flat plate placed at different locations from the nozzle edge |
| 271 | Ajithkumar K T | Dielectric property and thermogravimetric analysis of short carbon fiber (SCF)/nickel zinc ferrite (NZF) reinforced with beewax/soyawax/epoxy/ GF composite |
| 289 | Rakesh A | Experimental investigation of pool boiling heat transfer performance of an vertically downward EDM textured surface |
| 224 | Antony Giegy | Numerical analysis on the thermal performance of insulated containers |
| 286 | Sutheesh P M | Thermal management of proton exchange membrane fuel cell by hybrid cooling method |